

Application No.: 09/818,969  
Amendment dated November 18, 2003  
Reply to Office Action of August 18, 2003

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently Amended) A method for recording an image on a thermosensible thermosensitive image bearing medium that contains liquid crystal material exhibiting a cholesteric phase at a temperature range higher than a room temperature, said method comprising the steps of:

(a) heating the liquid crystal material contained in a first region of the thermosensible thermosensitive image bearing medium at a first temperature for a first time period by applying a first energy, thereby causing the first region to change from a base color to a first color; and

(b) heating the liquid crystal material contained in a second region of the thermosensible thermosensitive image bearing medium at a second temperature for a second time period by applying a second energy, thereby causing the second region to change to a second color, the second color being different from the first color, the first temperature being higher than the second temperature and the first time period being shorter than the second time period,

wherein the steps (a) and (b) are executed in any order.

2. (Original) A method as claimed in claim 1, wherein the step (a) is executed before the step (b).

3. (Original) A method as claimed in claim 1, wherein the step (a) is executed after the step (b).

4. (Original) A method as claimed in claim 1, wherein the step (a) is executed simultaneously with the step (b).

5. (Currently Amended) A method as claimed in claim 1, further comprising the step of:

(c) generating first and second signals based on image data, the first and second signal being respective for reproducing the first and second colors ~~different each other~~,

wherein the applications of the first and second energies are respectively executed by driving a writing head based on the first and second signals.

6. (Currently Amended) A method as claimed in claim 5, wherein the first color is represented by light of a first wavelength and the second color is represented by light of a second wavelength that is longer than the first wavelength.

7. (Original) A method as claimed in claim 5, wherein each of the first and second signals has a waveform comprising at least one pulse.

8. (Original) A method as claimed in claim 7, wherein the first time period is determined by a width of the at least one pulse of the first signal, and the second time period is determined by a width of the at least one pulse of the second signal.

9. (Original) A method as claimed in claim 7, wherein the first time period is determined by a number of the pulses of the first signal, and the second time period is determined by a number of the pulses of the second signal.

10. (Currently Amended) A method as claimed in claim 5, wherein the thermosensible thermosensitive image bearing medium comprises a photothermal converter, and wherein the writing head comprises a laser optical unit for irradiating an optical energy to the photothermal converter of the thermosensible thermosensitive image bearing medium.

11. (Currently Amended) A method as claimed in claim 5, wherein the writing head comprises a thermal head unit for applying a thermal energy to the liquid crystal material of the thermosensible thermosensitive image bearing medium.

12. (Currently Amended) A method as claimed in claim 1, further comprising the step of:

(c) quenching the thermosensible thermosensitive image bearing medium after the steps (a) and (b).

13. (Withdrawn) A recording apparatus for recording an image on a thermosensible image bearing medium that contains liquid crystal material exhibiting a cholesteric phase at a temperature range higher than a room temperature, said recording apparatus comprising:

a writing head for applying an energy to the thermosensible image bearing medium, the application of the energy causing the thermosensible image bearing medium so that the liquid crystal material is heated; and

a control section for controlling the writing head, the control section being adapted to generate at least a first driving signal and a second driving signal for driving the writing head based on image data, the writing head causing the liquid crystal material to be heated to a first temperature for a first time period based on the first driving signal and causing the liquid crystal material to be heated to a second temperature for a second time period based on the second driving signal, the first temperature being higher than the second temperature and the first time period being shorter than the second time period.

14. (Withdrawn) A recording apparatus as claimed in claim 13, wherein the first and second driving signals are respectively for reproducing first and second colors different each other.

15. (Withdrawn) A recording apparatus as claimed in claim 14, wherein the first color is represented by light of a first wavelength and the second color is represented by light of a second wavelength that is longer than the first wavelength.

16. (Withdrawn) A recording apparatus as claimed in claim 13, wherein each of the first and second driving signals has a waveform comprising at least one pulse.

17. (Withdrawn) A recording apparatus as claimed in claim 16, wherein the first time period is determined by a width of the at least one pulse of the first driving signal, and the second time period is determined by a width of the at least one pulse of the second driving signal.

18. (Withdrawn) A recording apparatus as claimed in claim 16, wherein the first time period is determined by a number of the pulses of the first driving signal, and the second time period is determined by a number of the pulses of the second driving signal.

19. (Withdrawn) A recording apparatus as claimed in claim 13, wherein the thermosensible image bearing medium comprises a photothermal converter, and wherein the writing head comprises a laser optical unit for irradiating an optical energy to the photothermal converter of the thermosensible image bearing medium.

20. (Withdrawn) A recording apparatus as claimed in claim 13, wherein the writing head comprises a thermal head unit for applying a thermal energy to the liquid crystal material of the thermosensible image bearing medium.

21. (New) A method for recording an image on a thermosensitive image bearing medium that contains liquid crystal material exhibiting a cholesteric phase at a temperature range higher than a room temperature, said method comprising the steps of:

(a) heating the liquid crystal material contained in the thermosensitive image bearing medium at a first temperature for a first time period by applying a first energy; and

(b) heating the liquid crystal material contained in the thermosensitive image bearing medium at a second temperature for a second time period by applying a second energy the first temperature being higher than the second temperature and the first time period being shorter than the second time period,

wherein the step (a) is executed simultaneously with the step (b).

22. (New) A method for recording an image on a thermosensitive image bearing medium that contains liquid crystal material exhibiting a cholesteric phase at a temperature range higher than a room temperature, said method comprising the steps of:

(a) heating the liquid crystal material contained in the thermosensitive image bearing medium at a first temperature for a first time period by applying a first energy; and

(b) heating the liquid crystal material contained in the thermosensitive image bearing medium at a second temperature for a second time period by applying a second energy the first temperature being higher than the second temperature and the first time period being shorter than the second time period,

(c) generating first and second signals based on image data, the first and second signals being respectively for reproducing a first color and a second color, the first and second color being different from each other and the first color being represented by light of a first wavelength and the second color being represented by light of a second wavelength that is longer than the first wavelength.

wherein the applications of the first and second energies are respectively executed by driving a writing head based on the first and second signals,

and wherein the steps (a) and (b) are executed in any order.